

THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE  
PROPERTY OF PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:

1. A method for the transformation of a monocot plant comprising,
  - i) exposing explant tissue of said monocot plant to an *Agrobacterium* strain under vacuum in the presence of a phenolic compound, said *Agrobacterium* strain comprising a heterologous gene of interest within a vector;
  - ii) removing said *Agrobacterium* from said explant tissue;
  - iii) adding an antibiotic against said *Agrobacterium*; and
  - iv) selecting explant tissue for occurrence of said heterologous gene of interest.
2. The method of claim 1 wherein said step of selecting explant tissue further comprises:
  - i) maintaining said explant tissue on media in absence of a selection agent producing differentiated calli;
  - ii) transferring said differentiated calli to media containing a selection agent; and
  - iii) obtaining calli that grow in the presence of the selection agent.
3. The method of claim 1 wherein said *Agrobacterium* comprises a regular binary vector.
4. The method of claim 1 wherein said explant tissue is callused coleoptile node.
5. The method of claim 1 wherein said explant tissue comprises a zygotic embryo.
6. The method of claim 2 wherein said *Agrobacterium* comprises a super virulent vector.

7. The method of claim 1, wherein said phenolic compound is acetosyringone.
8. The method of claim 7, wherein said explant tissue is exposed under vacuum from about 10 to about 15 min.
9. The method of claim 8, wherein said antibiotic comprises claforan.
10. A method for the transformation of a monocot plant comprising,
  - i) placing explant tissue of said monocot plant into media comprising a suspension of *Agrobacterium* to obtain a mixture, said *Agrobacterium* strain comprising a heterologous gene of interest within a vector;
  - ii) maintaining said mixture under vacuum in the presence of acetosyringone;
  - iii) releasing said vacuum and further incubating said explant tissue in the presence of said *Agrobacterium*;
  - iv) transferring said explant tissue to fresh media comprising acetosyringone and incubating said explant tissue in the dark;
  - v) washing said explant tissue with an antibiotic against said *Agrobacterium*,
  - vi) transferring said explant tissue to fresh media and allowing said explant tissue to differentiate, thereby producing differentiated calli;
  - vii) placing said differentiated calli onto media containing a selection agent, and maintaining said differentiated calli in the light; and
  - viii) obtaining calli that grow in the presence of the selection agent.
11. The method of claim 10 wherein said *Agrobacterium* comprises a super virulent vector.
12. The method of claim 10 wherein said *Agrobacterium* comprises a regular binary vector.

13. The method of claim 10 wherein the fresh media of step v) comprises said antibiotic against said *Agrobacterium*.

14. The method of claim 10 wherein said explant tissue is callused coleoptile node.

15. The method of claim 10 wherein said explant tissue comprises a zygotic embryo.

16. The method of claim 13 wherein said antibiotic is claforan.

17. A method for the transformation of a monocot plant comprising,

- i) placing explant tissue of said monocot plant into media comprising a phenolic compound, and a suspension of *Agrobacterium* to obtain a mixture, said *Agrobacterium* strain comprising a heterologous gene of interest within a vector;
- ii) washing said explant tissue with an antibiotic against said *Agrobacterium* and transferring said explant tissue to fresh media comprising acetosyringone and incubating said explant tissue in the dark;
- iii) transferring said explant tissue to fresh media and allowing said explant tissue to differentiate, thereby producing differentiated calli;
- iv) placing said differentiated calli to media containing a selection agent, and maintaining said differentiated calli in the light; and
- v) obtaining calli that grow in the presence of the selection agent.

18. The method of claim 17 wherein said *Agrobacterium* comprises a super virulent vector.

19. The method of claim 17 wherein said *Agrobacterium* comprises a regular binary vector.

20. The method of claim 17 wherein the media of step iii) comprises said antibiotic against said *Agrobacterium*.

21. The method of claim 17 wherein said explant tissue is callused coleoptile node.

22. The method of claim 17 wherein said explant tissue comprises a zygotic embryo.

23. The method of claim 2, wherein, in said step of maintaining, said explant tissue is maintained on media in absence of a selection agent from about 3 weeks to about 8 weeks.

24. The method of claim 10, wherein, in said step of transferring, said explant tissue is maintained on media in absence of a selection agent from about 3 weeks to about 8 weeks.

25. The method of claim 17, wherein, in said step of transferring, said explant tissue is maintained on media in absence of a selection agent from about 3 weeks to about 8 weeks.